***Draft / Subject to further government review*

REMEDIAL ACTION

STATEMENT OF WORK

LOWER LEY CREEK OPERABLE UNIT (OU)

ONONDAGA LAKE SUPERFUND SITE

Onondaga County, New York

EPA Region 2

April 2021

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1. INTRODUCTION

1.1 Purpose of the SOW This Statement of Work (SOW) sets forth the procedures and requirements for implementing the Work.

1.2 Structure of the SOW

- Section [REF _Ref381707995 \r \h] (Community Involvement) sets forth EPA's and Settling Defendants' (SDs') responsibilities for community involvement.
- Section [REF _Ref322614303 \r \h] (Remedial Action) sets forth requirements regarding the completion of the RA, including primary deliverables related to completion of the RA.
- Section [REF _Ref397089686 \r \h] (Reporting) sets forth SDs' reporting obligations.
- Section [REF _Ref322533247 \r \h] (Deliverables) describes the content of the supporting deliverables and the general requirements regarding SDs' submission of, and EPA's review of, approval of, comment on, and/or modification of, the deliverables.
- Section [REF _Ref319683735 \r \h] (Schedules) sets forth the schedule for submitting the primary deliverables, specifies the supporting deliverables that must accompany each primary deliverable, and sets forth the schedule of milestones regarding the completion of the RA.
- Section [REF _Ref367451471 \r \h] (State and Onondaga Nation Participation) addresses State and Onondaga Nation participation.
- Section [REF _Ref367104374 \r \h * MERGEFORMAT] (References) provides a list of references, including URLs.

1.3 The Scope of the Remedy includes the actions described in the Record of Decision ("ROD") executed on September 30, 2014, including:

a) Excavation of PCB-contaminated soils adjacent to Lower Ley Creek (the Creek) exceeding 1 milligram per kilogram (mg/kg) of PCBs in the upper two feet of soils and exceeding 10 mg/kg of PCBs in soils deeper than two feet;

b) Excavation of PCB-contaminated sediment within the Creek exceeding 1 mg/kg of PCBs;

c) Excavation of sediment to a depth of 1 foot within an approximate 1,200-foot reach of the Creek, immediately upstream of Interstate 81 where metals exceed cleanup objectives;

d) Excavation of PCB-contaminated sediment/soil from the adjacent wetlands exceeding 1 mg/kg of PCBs;

e) Transport of the excavated soils and sediments containing greater than 50 mg/kg of PCBs to a Toxic Substances Control Act (TSCA)-compliant facility;

f) Transport of those soils and sediments that are determined to be Resource Conservation and Recovery Act (RCRA) characteristic hazardous waste (i.e., fail Toxic Characteristic Leaching Procedure testing) and are non-TSCA waste (i.e., less than 50 mg/kg PCBs) to an off-site RCRA-compliant facility;

g) Transport of those soils and sediments that are not TSCA-regulated (less than 50 mg/kg of PCBs) and are not characteristically hazardous waste to an appropriate local disposal facility or, if a local disposal facility is not feasible, transport of these soils and sediments to a non-local facility for disposal;

h) Performance of wetland and habitat delineation to establish a baseline prior to the development of a restoration plan for affected areas;

i) Restoration of the unsubmerged excavated wetland areas with clean substrate and vegetation consistent with an approved habitat restoration plan[1];

j) Restoration of excavated soil areas with at least 2 feet of clean substrate and vegetation consistent with an approved habitat restoration plan[1], except in areas where there is underlying municipal refuse, in which areas a readily-visible and permeable subsurface demarcation layer delineating the interface between the refuse and clean soil cover will be installed;

k) Restoration of sediment removal areas within the Creek with at least one foot of substrate similar to the existing sediments for cover material over disturbed areas;

l) Implementation of institutional controls in the form of an environmental easement/restrictive covenant to be filed in the property records of Onondaga County that will, at a minimum, restrict the use of Affected Property to commercial and industrial uses and restrict intrusive activities in areas where residual contamination remains unless the activities are performed in accordance with an EPA-approved Site Management Plan (SMP); and

m) Development of an SMP that provides for the proper management of all post-construction remedy components, including the following: confirmation that the requisite engineering (*e.g.,* demarcation layer) and institutional controls are in place and that nothing has occurred that will impair the ability of such controls to protect public health or the environment; management of future excavations in areas of where contamination remains (including the areas where municipal refuse was disposed); development of an inventory of any use restrictions; implementation of the requirements of the environmental easement and/or

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[1] Habitat construction in excavated wetland areas and soil excavation areas will be performed to restore areas to match pre-excavation conditions, to the extent practicable, based on a habitat survey to be performed as part of the PDI, but will otherwise not interfere with the works of the regulating drainage district.

restrictive covenant described in Paragraph [REF _Ref43806190 \r \h]([REF _Ref43806170 \r \h]; performance of the operation and maintenance for the remedy; submission by the property owner or party implementing the remedy of periodic certifications that the institutional and engineering controls are in place; the performance of fish monitoring to determine the remaining levels of contamination in the fish and the rate of decline; and the performance of the habitat maintenance and monitoring required by the remedy (including, but not limited to, long and short-term remedy effectiveness, habitat restoration success and the recovery of biota).

1.4 The implementation of the Lower Ley Creek Operable Unit (OU) RA will be coordinated with the implementation of the remedy for Operable Unit 2 of the General Motors – Inland Fisher Guide subsite.

1.5 The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the Consent Decree (CD), have the meanings assigned to them in CERCLA, in such regulations, or in the CD, except that the term "Paragraph" or "¶" means a paragraph of the SOW, and the term "Section" means a section of the SOW, unless otherwise stated.

2. COMMUNITY INVOLVEMENT

2.1 Community Involvement Responsibilities

(a) EPA has the lead responsibility for developing and implementing community involvement activities at the Lower Ley Creek OU. EPA developed a subsite communications/outreach plan for the RD/RA during the Lower Ley Creek OU design effort under the Remedial Design Administrative Order on Consent.

(b) If requested by EPA, SDs shall participate in community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site. SDs' support of EPA's community involvement activities may include providing online access to initial submissions and updates of deliverables to (1) any Community Advisory Groups, (2) any Technical Assistance Grant recipients and their advisors, and (3) other entities to provide them with a reasonable opportunity for review and comment. EPA may describe in its CIP SDs' responsibilities for community involvement activities. All community involvement activities conducted by SDs at EPA's request are subject to EPA's oversight. Upon EPA's request, SDs shall establish a community information repository at or near the Site to house one copy of the administrative record.

(c) **SDs' CI Coordinator**. If requested by EPA, SDs shall, within 15 days of EPA's request, designate and notify EPA of SDs' Community Involvement Coordinator (SDs' CI Coordinator). SDs may hire a contractor for this purpose. SDs' notice

must include the name, title, and qualifications of the SDs' CI Coordinator. SDs' CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about the Site.

3. REMEDIAL ACTION

3.1 RA Work Plan. SDs shall submit an RA Work Plan (RAWP) for EPA approval that includes:

(a) A proposed RA Construction Schedule (Gantt chart);

(b) An updated health and safety plan that covers activities during the RA;

(c) Plans for satisfying permitting requirements, including obtaining permits for off-site activity (such as disposal) and for satisfying substantive requirements of permits for on-site activity; and

(d) A description of how the RA will be implemented using the principles specified in the EPA Region 2 Clean and Green Policy.

3.2 Independent Quality Assurance Team. SDs shall notify EPA of SDs' designated Independent Quality Assurance Team (IQAT). The IQAT will be independent of the Supervising Contractor. SDs may hire a third party for this purpose. SDs' notice must include the names, titles, contact information, and qualifications of the members of the IQAT. The IQAT will have the responsibility to determine whether Work is of expected quality and conforms to applicable plans and specifications. The IQAT will have the responsibilities as described in ¶ 2.1.3 of the *Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties*, EPA/540/G-90/001 (Apr. 1990).

3.3 Meetings and Inspections

(a) **Preconstruction Conference**. SDs shall hold a preconstruction conference with EPA and others as directed or approved by EPA and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). SDs shall prepare minutes of the conference and shall distribute the minutes to all Parties.

(b) **Periodic Meetings**. During the construction portion of the RA (RA Implementation), SDs shall meet weekly with EPA, and others as directed or determined by EPA, to discuss construction issues. SDs shall distribute an agenda and list of attendees to all Parties prior to each meeting. SDs shall prepare minutes of the meetings and shall distribute the minutes to all Parties.

(c) **Inspections**

(1) EPA or its representative shall conduct periodic inspections of or have an on-site presence during the Work. At EPA's request, the Supervising Contractor or other designee shall accompany EPA or its representative during inspections.

(2) SDs shall provide on-site office space for EPA personnel and EPA's oversight contractor to perform their oversight duties. The minimum office requirements are a private trailer with at least 150 square feet of floor space, an office desk with chair, access to facsimile and reproduction equipment, wireless internet, and sanitation facilities.

(3) SDs shall provide personal protective equipment needed for EPA personnel and oversight officials to perform their oversight duties.

(4) Upon notification by EPA of any deficiencies in the RA implementation, SDs shall take all necessary steps to correct the deficiencies and/or bring the RA into compliance with the approved Final RD under the Remedial Design AOC, any approved design changes, and/or the approved RAWP. If applicable, SDs shall comply with any schedule provided by EPA in its notice of deficiency.

3.4 Emergency Response and Reporting

(a) **Emergency Response and Reporting**. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, SDs shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the EPA Project Coordinator (as specified in ¶ [REF _Ref381712243 \w \h]) orally; and (3) take such actions in consultation with the EPA Project Coordinator and in accordance with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan, and any other deliverable approved by EPA under the SOW.

(b) **Release Reporting**. Upon the occurrence of any event during performance of the Work that SDs are required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, SDs shall immediately notify the EPA Project Coordinator orally.

(c) For any event covered by ¶ 3.4(a) and ¶ 3.4(b), if the EPA Project Coordinator and the Alternate EPA Project Coordinator are unavailable, the Regional Duty Officer through the National Response Center should be contacted at (800) 424-8802.

(d) For any event covered by ¶ [REF _Ref366761786 \w \h] and ¶ [REF _Ref366761765 \w \h], SDs shall: (1) within 14 days after the onset of such event, submit a report to the EPA Project Coordinator describing the actions or

events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to the EPA Project Coordinator describing all actions taken in response to such event.

(e) The reporting requirements under ¶ [REF _Ref366761871 \w \h] are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

3.5 Off-Site Shipments

(a) SDs may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. SDs will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if SDs obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).

(b) SDs may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide notice to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator. This notice requirement will not apply to any off-Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. SDs also shall notify the state environmental official referenced above and the EPA Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. SDs shall provide the notice after the award of the contract for RA implementation and before the Waste Material is shipped.

(c) SDs may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, *EPA's Guide to Management of Investigation Derived Waste*, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 CFR § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

3.6 Certification of RA Completion

(a) **RA Completion Inspection**. The RA is "Complete" for purposes of this ¶ [REF _Ref329960136 \r \h] when it has been fully performed and the Performance Standards set forth in the ROD have been achieved. SDs shall schedule an inspection for the purpose of obtaining EPA's Certification of RA Completion. The inspection must be attended by SDs and EPA and/or their representatives.

(b) **RA Report**. Following the inspection, SDs shall submit an RA Report to EPA requesting EPA's Certification of RA Completion. The report must: (1) include certifications by a registered professional engineer and by SDs' Project Coordinator that the RA is complete; (2) include as-built drawings signed and stamped by a registered professional engineer; (3) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's *Close Out Procedures for NPL Sites* guidance (May 2011), as supplemented by *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017); (4) contain monitoring data to demonstrate that Performance Standards set forth in the ROD have been achieved; and (5) be certified in accordance with ¶ [REF _Ref322600576 \r \h * MERGEFORMAT] (Certification).

(c) If EPA concludes that the RA is not Complete, EPA shall so notify SDs. EPA's notice must include a description of any deficiencies and may include a schedule for addressing such deficiencies or may require SDs to submit a schedule for EPA approval. SDs shall perform all activities described in the notice in accordance with the schedule if EPA provides a schedule.

(d) If EPA concludes, based on the initial or any subsequent RA Report that the RA is Complete, EPA shall so certify to SDs. This certification will constitute the Certification of RA Completion for purposes of the CD, including Section XVI of the CD (Covenants by Plaintiff[s]). Certification of RA Completion will not affect SDs' remaining obligations under the CD.

3.7 Certification of Work Completion

(a) **Work Completion Inspection**. SDs shall schedule an inspection for the purpose of obtaining EPA's Certification of Work Completion. The inspection must be attended by SDs and EPA and/or their representatives.

(b) **Work Completion Report**. Following the inspection, SDs shall submit a report to EPA requesting EPA's Certification of Work Completion. The report must: (1) include certifications by a registered professional engineer and by SDs' Project Coordinator that the Work, including all O&M activities, is complete; and (2) be certified in accordance with ¶ [REF _Ref329960136 \r \h] (Certification). If the RA Report submitted under ¶ [REF _Ref336525742 \r \h] includes all elements required under this ¶ [REF _Ref336525840 \w \h], then the RA Report suffices to satisfy all requirements under this ¶ [REF _Ref336525840 \w \h].

(c) If EPA concludes that the Work is not complete, EPA shall so notify SDs. EPA's notice must include a description of the activities that SDs must perform to complete the Work. EPA's notice must include specifications and a schedule for such activities or must require SDs to submit specifications and a schedule for EPA approval. SDs shall perform all activities described in the notice or in the EPA-approved specifications and schedule.

(d) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to SDs. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) obligations under Sections VIII (Property Requirements), XX (Retention of Records), and XIX (Access to Information) of the CD; (2) Institutional Controls obligations as provided in the Institutional Controls Implementation and Assurance Plan (ICIAP) to be submitted under Paragraph [REF _Ref40872299 \r \h * MERGEFORMAT], below; (3) compliance with the SMP; and (4) reimbursement of EPA's Future Response Costs under Section X (Payments for Response Costs) of the CD.

4. REPORTING

4.1 **Progress Reports**. Commencing with the month following lodging of the CD and until EPA approves the RA Completion, SDs shall submit progress reports to EPA on a monthly basis, or as otherwise requested by EPA. The progress reports shall be submitted to EPA by the 15th day of each month. The reports must cover all activities that took place during the prior reporting period, including:

(a) The actions that have been taken toward achieving compliance with the CD;

(b) A summary of all validated results of sampling, tests, and all other data received or generated by SDs that became available in the prior reporting period;

(c) A description of all deliverables that SDs submitted to EPA;

(d) A description of all activities relating to RA Implementation that are scheduled for the next six weeks;

(e) An updated RA Implementation Schedule, together with information regarding percentage of completion, delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays;

(f) A description of any modifications to the work plans or other schedules that SDs have proposed or that have been approved by EPA; and

(g) A description of all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next six weeks.

4.2 **Notice of Progress Report Schedule Changes**. If the schedule for any activity described in the Progress Reports, including activities required to be described under ¶ [REF _Ref322611383 \r \h], changes, SDs shall notify EPA of such change at least 7 days before performance of the activity.

5. DELIVERABLES

5.1 **Applicability**. SDs shall submit deliverables for EPA approval or for EPA comment as specified in the SOW. If neither is specified, the deliverable does not require EPA's approval or comment. Paragraphs [REF _Ref397591332 \r \h] (In Writing) through [REF _Ref397591339 \r \h] (Technical Specifications) apply to all deliverables. Paragraph [REF _Ref322600576 \w \h] (Certification) applies to any deliverable that is required to be certified. Paragraph [REF _Ref322533252 \r \h] (Approval of Deliverables) applies to any deliverable that is required to be submitted for EPA approval.

5.2 **In Writing**. As provided in **¶ 97** of the CD, all deliverables under this SOW must be in writing unless otherwise specified.

5.3 **General Requirements for Deliverables.** All deliverables must be submitted by the deadlines in the RA Schedule. SDs shall submit all deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 6.4. All other deliverables shall be submitted to EPA in the electronic form specified by the EPA Project Coordinator. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", SDs shall also provide EPA with paper copies of such exhibits.

5.4 **Technical Specifications**

(a) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format. Region 2 EPA uses EDP version 7 and EDD format version 4. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

(b) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at [HYPERLINK "https://www.epa.gov/geospatial/epa-metadata-editor"].

(c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult [HYPERLINK "https://www.epa.gov/geospatial/geospatial-policies-and-standards"] for any further available guidance on attribute identification and naming.

(d) Spatial data submitted by SDs does not, and is not intended to, define the boundaries of the Lower Ley Creek OU.

5.5 Certification. All deliverables that require compliance with this ¶ [REF _Ref322600576 \w \h] must be signed by the SDs' Project Coordinator, or other responsible official of SDs, and must contain the following statement:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

5.6 Approval of Deliverables

(a) **Initial Submissions**

(1) After review of any deliverable that is required to be submitted for EPA approval under the CD or the SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

(2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

(b) **Resubmissions**. Upon receipt of a notice of disapproval under ¶ [REF _Ref322533256 \w \h] (Initial Submissions), or if required by a notice of approval upon specified conditions under ¶ [REF _Ref322533256 \w \h], SDs shall, within forty-five (45) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for approval. After review of the resubmitted deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring SDs to correct the deficiencies; or (5) any combination of the foregoing.

(c) **Implementation**. Upon approval, approval upon conditions, or modification by EPA under ¶ [REF _Ref322533256 \w \h] (Initial Submissions) or ¶ [REF

_Ref322533499 \w \h] (Resubmissions), of any deliverable, or any portion thereof: (1) such deliverable, or portion thereof, will be incorporated into and enforceable under the CD; and (2) SDs shall take any action required by such deliverable, or portion thereof. The implementation of any non-deficient portion of a deliverable submitted or resubmitted under ¶ [REF _Ref322533256 \w \h] or ¶ [REF _Ref322533499 \w \h] does not relieve SDs of any liability for stipulated penalties under Section **XV** (Stipulated Penalties) of the CD.

5.7 Supporting Deliverables. SDs shall submit each of the following supporting deliverables for EPA approval, except as specifically provided. SDs shall develop the deliverables in accordance with all applicable regulations, guidances, and policies (see Section [REF _Ref367104374 \w \h] (References)). SDs shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by EPA.

(a) **Health and Safety Plan**. The Health and Safety Plan (HASP) describes all activities to be performed to protect on site personnel and area residents from physical, chemical, and all other hazards posed by the Work. SDs shall develop the HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration (OSHA) requirements under 29 C.F.R. §§ 1910 and 1926. The HASP should be updated to cover activities during the RA and after RA completion. EPA does not approve the HASP but will review it to ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment.

(b) **Emergency Response Plan**. The Emergency Response Plan (ERP) must describe procedures to be used in the event of an accident or emergency at the Lower Ley Creek OU during the RA (for example, power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The ERP must include:

(1) Name of the person or entity responsible for responding in the event of an emergency incident;

(2) Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;

(3) Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;

(4) Notification activities in accordance with ¶ [REF _Ref366761765 \w \h] (Release Reporting) in the event of a release of hazardous substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004; and

(5) A description of all necessary actions to ensure compliance with Paragraph [REF _Ref40871785 \r \h] (Emergency Response and Reporting) in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.

(c) **Field Sampling Plan**. The Field Sampling Plan (FSP) supplements the QAPP. The FSP addresses all sample collection activities. The FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. SDs shall develop the FSP in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988).

(d) **Quality Assurance Project Plan**. The Quality Assurance Project Plan (QAPP) augments the FSP and addresses sample analysis and data handling regarding the Work. The QAPP must include a detailed explanation of SDs' quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. SDs shall develop the QAPP in accordance with *EPA Requirements for Quality Assurance Project Plans*, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006); *Guidance for Quality Assurance Project Plans*, QA/G-5, EPA/240/R 02/009 (Dec. 2002); and *Uniform Federal Policy for Quality Assurance Project Plans*, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005). The QAPP also must include procedures:

(1) To ensure that EPA and its authorized representative have reasonable access to laboratories used by SDs in implementing the CD (SDs' Labs);

(2) To ensure that SDs' Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;

(3) To ensure that SDs' Labs perform all analyses using EPA-accepted methods (i.e., the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)) or other methods acceptable to EPA;

(4) To ensure that SDs' Labs participate in an EPA-accepted QA/QC program or other program QA/QC acceptable to EPA;

(5) For SDs to provide EPA notice at least 28 days prior to any sample collection activity;

(6) For SDs to provide split samples and/or duplicate samples to EPA upon request;

(7) For EPA to take any additional samples that they deem necessary;

(8) For EPA to provide to SDs, upon request, split samples and/or duplicate samples in connection with EPA's and the State's oversight sampling;

(9) For SDs to submit to EPA all validated sampling and test results and other data in connection with the implementation of the CD; and

(10) To ensure the laboratories to be used will be specified in the QAPP and all laboratories will be certified for the analytical service to be provided by one of the following accreditation/certification programs: USEPA Contract Laboratory Program ("CLP"), National Environmental Laboratory Accreditation Program ("NELAP"), or a certification issued by a program conducted or approved by a state, and acceptable to EPA.

(e) **Site Wide Monitoring Plan**. The purpose of the Site Wide Monitoring Plan (SWMP) is to obtain baseline information regarding the extent of contamination in affected media at the Site; to obtain information, through short- and long- term monitoring, about the movement of and changes in contamination throughout the Site, before and during implementation of the RA; to obtain information regarding contamination levels to determine whether Performance Standards (PS) set forth in the ROD are achieved; and to obtain information to determine whether to perform additional actions, including further Lower Ley Creek OU monitoring. The SWMP must include:

(1) Description of the environmental media to be monitored;

(2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of monitoring, analytical parameters to be monitored, and analytical methods employed;

(3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;

(4) Description of verification sampling procedures;

(5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, monitoring reports, and monthly and annual reports to EPA and State agencies; and

(6) Description of proposed additional monitoring and data collection actions (such as increases in frequency of monitoring, and/or installation of additional monitoring devices in the affected areas) in the event that results from monitoring devices indicate changed conditions (such as higher than expected concentrations of the contaminants of concern or groundwater contaminant plume movement).

(f) **Construction Quality Assurance/Quality Control Plan (CQA/QCP)**. The purpose of the Construction Quality Assurance Plan (CQAP) is to describe planned and systemic activities that provide confidence that the RA implementation will satisfy all plans, specifications, and related requirements, including quality objectives. The purpose of the Construction Quality Control Plan (CQCP) is to describe the activities to verify that RA implementation has satisfied all plans, specifications, and related requirements, including quality objectives. The CQA/QCP must:

(1) Identify, and describe the responsibilities of, the organizations and personnel implementing the CQA/QCP;

(2) Describe the PS required to be met to achieve Completion of the RA;

(3) Describe the activities to be performed: (i) to provide confidence that PS will be met; and (ii) to determine whether PS have been met;

(4) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;

(5) Describe industry standards and technical specifications used in implementing the CQA/QCP;

(6) Describe procedures for tracking construction deficiencies from identification through corrective action;

(7) Describe procedures for documenting all CQA/QCP activities; and

(8) Describe procedures for retention of documents and for final storage of documents.

(g) **Site Management Plan**. The SMP must include:

(1) A description of the institutional and engineering controls, including supporting tables and figures;

(2) Procedures to confirm that the engineering controls and institutional controls are in place and effective;

(3) Provisions for the management of future excavations in areas after the remedial construction work is completed (e.g., to address how excavated soils will be managed in the event of future maintenance/repair activities of the pipelines and in areas where municipal refuse was disposed); and

(4) Provisions for fish monitoring to determine the remaining levels of contamination in the fish and the rate of decline, as well as the performance of the habitat maintenance and monitoring required by the

remedy (including, but not limited to, long and short-term remedy effectiveness, habitat restoration success and the recovery of biota).

(h) **O&M Plan**. The O&M Plan describes the requirements for inspecting, operating, and maintaining the RA. SDs shall develop the O&M Plan in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017). The O&M Plan must include the following additional requirements:

(1) Description of PS required to be met to implement the ROD;

(2) Description of activities to be performed: (i) to provide confidence that PS will be met; and (ii) to determine whether PS have been met;

(3) **O&M Reporting**. Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records, monitoring reports, and monthly and annual reports to EPA and State agencies;

(4) Description of corrective action in case of systems failure, including: (i) alternative procedures to prevent the release or threatened release of Waste Material which may endanger public health and the environment or may cause a failure to achieve PS; (ii) analysis of vulnerability and additional resource requirements should a failure occur; (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and (iv) community notification requirements; and

(5) Description of corrective action to be implemented in the event that PS are not achieved; and a schedule for implementing these corrective actions.

(i) **O&M Manual**. The O&M Manual serves as a guide to the purpose and function of the equipment and systems that make up the remedy. SDs shall develop the O&M Manual in accordance with *Guidance for Management of Superfund Remedies in Post Construction*, OLEM 9200.3-105 (Feb. 2017).

(j) **Institutional Controls Implementation and Assurance Plan**. The Institutional Controls Implementation and Assurance Plan (ICIAP) describes plans to implement, maintain, and enforce the Institutional Controls (ICs) at the Site. SDs shall develop the ICIAP in accordance with *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites*, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), and *Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites*, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012). The ICIAP must include the following additional requirements:

(1) Locations of recorded real property interests (e.g., easements, liens) and resource interests in the property that may affect ICs (e.g., surface, mineral, and water rights) including accurate mapping and geographic information system (GIS) coordinates of such interests; and

(2) Legal descriptions and survey maps that are prepared according to current American Land Title Association (ALTA) Survey guidelines and certified by a licensed surveyor.

5.8 Periodic Monitoring Reports and Inspections. SDs shall participate in periodic inspections in support of EPA's Five-Year Reviews. SDs shall conduct periodic monitoring in accordance with Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P (June 2001), and any other relevant five-year review guidance and submit post-RA periodic monitoring reports to EPA. Monitoring reports will support EPA's reviews of whether the RA is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) (also known as "Five-year Reviews").

6. SCHEDULES

6.1 Applicability and Revisions. All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RA Schedule set forth below. SDs may submit proposed revised RA Schedules for EPA approval. Upon EPA's approval, the revised RA Schedules supersede the RA Schedules set forth below, and any previously-approved RA Schedules.

6.2 RA Schedule

	Description of Deliverable / Task	**¶ Ref.**	**Deadline**
1	Award RA contract		150 days after EPA Notice of Authorization to Proceed with RA
2	RAWP	[REF _Ref330378869 \w \h * MERGEFORMAT]	180 days after EPA Notice of Authorization to Proceed with RA
3	Designate IQAT	[REF _Ref329615846 \r \h * MERGEFORMAT]	30 days after Approval of RAWP
4	Pre-Construction Conference	[REF _Ref330393430 \r \h * MERGEFORMAT]	14 days after Approval of RAWP
5	Start of Construction		45 days after Approval of RAWP
6	Completion of Construction		As defined in RAWP
7	Pre-final Inspection	[REF _Ref340063036 \r \h]	21 days after completion of construction
8	Pre-final Inspection Report	[REF _Ref330393841 \r \h]	21 days after completion of Pre-final Inspection
9	Final Inspection		21 days after Completion of Work identified in Pre-final Inspection Report
10	RA Report	[REF _Ref330393841 \r \h]	30 days after Final Inspection

12	Work Completion Report	[REF _Ref330393950 \r \h * MERGEFORMAT]	

7. STATE AND ONONDAGA NATION PARTICIPATION

7.1 **Copies**. SDs shall, at any time they send a deliverable to EPA, send a copy of such deliverable to the State and to the Onondaga Nation for their review. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to SDs, send a copy of such document to the State and to the Onondaga Nation.

7.2 **Review and Comment**. The State and the Onondaga Nation will have a reasonable opportunity for review and comment prior to:

(a) Any EPA approval or disapproval under ¶ [REF _Ref322533252 \r \h * MERGEFORMAT] (Approval of Deliverables) of any deliverables that are required to be submitted for EPA approval; and

(b) Any disapproval of, or Certification of RA Completion under ¶ [REF _Ref329960136 \r \h * MERGEFORMAT] (Certification of RA Completion), and any disapproval of, or Certification of Work Completion under ¶ [REF _Ref338780161 \r \h] (Certification of Work Completion).

8. REFERENCES

8.1 The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA Web pages listed in ¶ [REF _Ref397961018 \r \h]:

(a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).

(b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).

(c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).

(d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).

(e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr.1990).

(f) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).

(g) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).

(h) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).

(i) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).

(j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).

(k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).

(l) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).

(m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).

(n) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).

(o) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).

(p) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).

(q) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).

(r) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).

(s) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016), [HYPERLINK "https://www.epa.gov/superfund/community-involvement-tools-and-resources"].

(t) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).

(u) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).

(v) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).

(w) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).

(x) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).

(y) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), [HYPERLINK "https://www.epa.gov/geospatial/geospatial-policies-and-standards"] and [HYPERLINK "https://www.epa.gov/geospatial/epa-national-geospatial-data-policy"].

(z) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).

(aa) Principles for Greener Cleanups (Aug. 2009), [HYPERLINK "https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups"].

(bb) EPA Region 2 Clean and Green Policy, available at [HYPERLINK "https://www.epa.gov/greenercleanups/epa-region-2-clean-and-green-policy"].

(cc) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).

(dd) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).

(ee) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).

(ff) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).

(gg) Construction Specifications Institute's MasterFormat® 2018, available from [HYPERLINK "https://www.csiresources.org/home"].

(hh) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)

(ii) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).

(jj) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).

(kk) [HYPERLINK "http://www.epaosc.org/_HealthSafetyManual/manual-index.htm"], [HYPERLINK "http://www.epaosc.org/_HealthSafetyManual/emergency-responder-manual-directive-final.pdf"] (July 2005 and updates), [HYPERLINK "https://www.epaosc.org/_HealthSafetyManual/manual-index.htm"].

(ll) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).

(mm) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).

(nn) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).

(oo) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017), [HYPERLINK "https://www.epa.gov/superfund/superfund-post-construction-completion"].

8.2 A more complete list may be found on the following EPA Web pages:

Laws, Policy, and Guidance: [HYPERLINK "https://www.epa.gov/superfund/superfund-policy-guidance-and-laws"]

Test Methods Collections: [HYPERLINK "https://www.epa.gov/measurements/collection-methods"]

For any regulation or guidance referenced in the CD or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after SDs receive notification from EPA of the modification, amendment, or replacement.